

METHOD FOR OBTAINING ELLIPTICAL AND ROUNDED SHAPES USING
BEAM SHAPING

5 ABSTRACT

A method of fabricating a mask (316) for patterning a semiconductor wafer. The mask (316) includes elliptical (340) or rounded features formed using an elliptical-shaped energy beam (350). Undesired stair-
10 step shaped edges (344) of the oval (340) or rounded features formed by using a substantially circular-shaped energy beam to form the oval or rounded features are smoothed with the elliptical-shaped energy beam (350). A
15 method of fabricating a semiconductor device with the mask (316) is included. The elliptical-shaped energy beam (350) may also be used to directly pattern a semiconductor wafer.